

# PATENT COOPERATION TREATY

224/516

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: C. FREDERICK KOENIG III VOLPE AND KOENIG, PC. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103	<b>RECEIVED</b> <hr style="width: 50%; margin: 0 auto;"/> <b>AM/PM</b>  <b>JUL 27 2004</b>
<b>VOLPE &amp; KOENIG, P.C.</b>	

## PCT

### NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing (day/month/year)	<b>23 JUL 2004</b>
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Applicant's or agent's file reference *I*20419.1.WO			<b>IMPORTANT NOTIFICATION</b>		
International application No.  PCT/US03/38185	International filing date (day/month/year)  25 November 2003 (25.11.2003)	Priority date (day/month/year)  26 November 2002 (26.11.2002)			
Applicant  INTERDIGITAL TECHNOLOGY CORP					

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

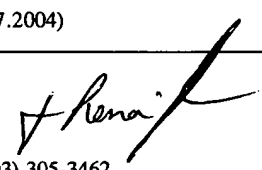
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Tanmay Lele Telephone No. (703) 305-3462
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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1-2-0419.1WO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/38185	International filing date (day/month/year) 25 November 2003 (25.11.2003)	Priority date (day/month/year) 26 November 2002 (26.11.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): 455/522 and US Cl.: H04B 7/20		
Applicant INTERDIGITAL TECHNOLOGY CORP		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>   </u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand 25 May 2004 (25.05.2004)	Date of completion of this report 08 July 2004 (08.07.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Tanmay Lele  Telephone No. (703) 305-3462	

Form PCT/IPEA/409 (cover sheet)(July 1998)

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed.
- ☐ the description:  
pages 1-26 \_\_\_\_\_ as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☐ the claims:  
pages 27-39 \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☐ the drawings:  
pages 1-9 \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☐ the sequence listing part of the description:  
pages NONE \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US03/38185

## V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. STATEMENT

Novelty (N)	Claims <u>1-49</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-49</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-49</u>	YES
	Claims <u>NONE</u>	NO

### 2. CITATIONS AND EXPLANATIONS

Please See Continuation Sheet

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**V. 2. Citations and Explanations:**

Claim 1 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest method of transmission power control for a wireless transmit receive unit (WTRU) that transmits data signals in a forward channel in selectively sized block allocations where the WTRU is configured to make forward channel power adjustments as a function of target metrics computed based on the data signals as received over the forward channel, the method comprising: receiving data signals from the WTRU in a block allocation having a predetermined size S on the forward channel; computing target metrics for the WTRU's forward channel power adjustments based on the detection of predetermined error conditions in the signals received on the forward channel including: setting an initial target metric value; and after a preliminary period at the initial value, changing the target metric by a step up or a step down amount at time intervals of a predetermined length whereby the target metric is increased by the step up amount if a predetermined error condition has been detected in an immediately preceding time interval or is decreased by the step down amount if the predetermined error condition has not been detected the immediately preceding time interval; and setting the step down amount at an initial transient state level based on the predetermined block allocation size S, such that the initial step down amount is set at a level at least as great as a predetermined step down amount for a steady state steady state level and, where the initial step down amount is greater than the predetermined step down amount for the steady state steady state level, reducing the step down amount by a selected amount to a lower level if a predetermined error condition has been detected in an immediately preceding time interval until the step down amount is reduced to the predetermined step down amount for the steady state steady state level.

Claims 2 - 11 meet the criteria set out in PCT Article 33(2)-(3), because they depend on claim 1.

Claim 12 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a receiving wireless transmit receive unit (WTRU) for implementing transmission power control for a transmitting WTRU that transmits data signals in a forward channel in selectively sized block allocations where the transmitting WTRU is configured to make forward channel transmission power adjustments as a function of target metrics computed by the receiving WTRU, the receiving WTRU comprising: a receiver for receiving data signals in a block allocation having a predetermined size S from a transmitting WTRU on a forward channel; a processor for computing target metrics for implementing forward channel transmission power adjustments in the transmitting WTRU based on the detection of predetermined error conditions in the data signals received on the forward channel; and said processor configured to compute target metrics such that: after a preliminary period at an initial value, the target metric is changed by a step up or a step down amount at time intervals of a predetermined length whereby the target metric is increased by the step up amount if a predetermined error condition has been detected in an immediately preceding time interval or the target metric is decreased by the step down amount if the predetermined error condition has not been detected in the immediately preceding time interval; the step down amount is set at an initial transient state level based on the predetermined block allocation size S, such that the initial step down amount is set at a level at least as great as a predetermined step down amount for a steady state steady state level; and where the initial step down amount is greater than the predetermined step down amount for the steady state steady state level, the step down amount is reduced by a selected amount to a lower level if a predetermined error condition has been detected in an immediately preceding time interval until the step down amount is reduced to the predetermined step down amount for the steady state steady state level.

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

level.

Claims 13 - 22 meet the criteria set out in PCT Article 33(2)-(3), because they depend on claim 12.

Claim 23 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a method of transmission power control for a wireless transmit receive unit (WTRU) that transmits data signals in a forward channel in selectively sized block allocations where the WTRU is configured to make forward channel power adjustments as a function of target metrics computed based on the data signals as received over the forward channel, the method comprising: receiving a series of block allocations of data signals spaced apart in time from the WTRU on the forward channel; for the data signals of each block allocation, computing target metrics for the WTRU's forward channel power adjustments based on the detection of predetermined error conditions in the signals received on the forward channel including setting an initial target metric value and storing a last target metric computed for each block allocation of data; and for the data signals of each block allocation after a first block allocation, setting the initial target metric value as a function of the last target metric computed for an immediately preceding block allocation and an inter-allocation adjustment based on the time spacing from the immediately preceding block allocation.

Claims 24 - 35 meet the criteria set out in PCT Article 33(2)-(3), because they depend on claim 23.

Claim 36 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest A receiving wireless transmit receive unit (WTRU) for implementing transmission power control for a transmitting WTRU that transmits data signals in a forward channel in selectively sized block allocations where the transmitting WTRU is configured to make forward channel transmission power adjustments as a function of target metrics computed by the receiving WTRU, the receiving WTRU comprising: a receiver for receiving a series of block allocations of data signals spaced apart in time from the WTRU on the forward channel; a processor for computing target metrics for implementing forward channel transmission power adjustments in the transmitting WTRU based on the detection of predetermined error conditions in the data signals received on the forward channel; and said processor configured to compute target metrics such that: for the data signals of each block allocation, an initial target metric value is set and a last target metric computed for each block allocation of data is stored; and for the data signals of each block allocation after a first block allocation, the initial target metric value is set as a function of the stored last target metric computed for an immediately preceding block allocation and the time spacing from the immediately preceding block allocation.

Claims 37 - 49 meet the criteria set out in PCT Article 33(2)-(3), because they depend on claim 36.

----- NEW CITATIONS -----